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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEE, Y MY QUACH

ART UNIT PAPER NUMBER

2875

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/801,349

Applicant(s)

MOISEL, JOERG

Examiner

Lee Y Quach

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-23, 25, 27, 28 and 30 is/are rejected.
- 7) ☒ Claim(s) 24, 26, 29, 31 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/04 & 6/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/22/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***DETAILED ACTION***

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of "a flat heat sink in the form of a disc is arranged on the side of the lens which faces away from the light source and is thermally connected to the cooling element" as claimed in claim 29 and "the light source represents an array comprising two or more individual light sources, which is arranged on a mount and whose mount is thermally conductively connected to the cooling element" as claimed in claim 30, "two or more flat elements are mechanically connected to the reflector" as claimed in claim 31 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities: Paragraph 00036, line 7, the reference numeral "5" is incorrect and should be changed to --4--. Note the light source 4 on lines 9 to 10 of page 16 and drawing figures 1 to 3. Appropriate correction is required.

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17 to 23, 25, 27, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forbes in view of Holz et al.

Forbes discloses a reflector (15) having a focal point, a light source (12) in the area of the focal point of the reflector (note that the light source may be moved for proper focus, the light source would therefore obviously be in the area of the focal point), a transparent lens (28), a cooling element having one or more such as four essentially flat elements (29) arranged running radially from the center axis, arranged rotationally symmetrically about the center axis and arranged in the form of a star, the cooling element which is thermally connected to the light source and extending from the light source to the lens and projected into the lens (note that the cooling element and the lens cast in one piece, the cooling element is therefore capable of projected into the lens), and the cooling element extending along the center axis of the reflector (figures 1 and 2). Forbes also discloses that the cooling element is not the same color as the reflector (note that the cooling element having a transparent property while the reflector having a non transparent but reflecting property), and the cooling element does not project beyond the lens. However, Forbes does not disclose that the light source is a semiconductor light source which emits infrared radiation.

Holz et al. teach the use of a semiconductor light source which emits infrared radiation in the headlight for reducing the damage effect of light on the eyes or the optical nerves to improve visibility and safety (paragraph 0011, lines 5 to 11 and paragraph 0014, line 2). Holz et al. also teach that it is advantageous to employ one or more semiconductor light sources assembled into arrays (paragraph 0013, lines 5 to 7) to produce a very high intensity headlight emission.

It would have been obvious to one skilled in the art to provide the light source of Forbes with a semiconductor light source which emits infrared radiation, as shown by Holz et al., for reducing the damage effect of light on the eyes or the optical nerves to improve safety.

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With regards to claim 19, note that to have the cooling element in the form of a rod would have been an obvious to one skilled in the art, which provides no unusual, unobvious and/or unexpected result and is therefore deemed to fall within a purview of an ordinary engineering design technique to provide the cooling element in any desirable form including the form of a rod to control the amount and speed of heat conduction to suit different applications.

With regards to claim 25, note that to have the cooling element composed of the material as claimed would have been an obvious to one skilled in the art, which provides no unusual, unobvious and/or unexpected result and is therefore deemed to fall within a purview of an ordinary engineering design technique to provide the cooling element in any desirable material including the material as claimed to effectively influence the amount and speed of the heat transfer and conduction to suit different applications.

With regards to claim 30, it would have been obvious to one skilled in the art to provide the light source of Forbes with an array comprising two ore more individual light sources arranged on a mount, as shown by Holz et al., for enhancing the light intensity of the headlight emission.

6. Claims 24, 26, 29, 31 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

English et al. is cited to show other pertinent cooling member for automobile lamp in combination with a reflector and a lens.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Tuesday and Thursday from 8:30 am to 4:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding

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should be directed to the Customer Service whose telephone number is 571-272-2815.

Y.Q.  
July 19, 2005



Y Quach Lee  
Patent Examiner  
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